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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,310	12/18/2001	David Ross Mathog		8215

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EXAMINER	
MARKS, CHRISTINA M	
ART UNIT	PAPER NUMBER
3713	

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,310	MATHOG, DAVID ROSS	
	Examiner	Art Unit	
	C. Marks	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-4,11 and 22-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-4,11 and 22-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *22 March 2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The objection to Figures 3B, 4B and 5 has been withdrawn due to the cancellation of these figures in the amendment filed 16 March 2004.

Specification

The objection to the specification has been withdrawn due to the substitute specification field 16 March 2004 removing all of the new matter.

Claim Rejections - 35 USC § 112

The rejection of claims 2-21 under 35 U.S.C. §112 has been withdrawn due to the cancellation of the claims and/or subject matter in the amendment filed 16 March 2004.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-25 and 30-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 25 recites the limitation "the occupancy values" in line 1. There is insufficient antecedent basis for this limitation in the claim. There is no definition of occupancy values in the parent claim and thus one of ordinary skill in the art would not be able to ascertain the variable the Applicant is claiming or how it affects and average time or how such an average time is determined from such a variable.

Claims 24 and 30-33 recites the limitation "the order of the device states" in line 1. There is insufficient antecedent basis for this limitation in the claim. There is no definition of an

order or of device states in the parent claim. There is no specific requirement of an order in the parent only setting the manner in which a single state is to be varied in time. There is not a mention of a plurality of states or their order thus one of ordinary skill in the art would not be able to ascertain how the order can be random, sequential, or periodic as there is only definition of a single state being set in the parent claim.

Claims 34-36 recites the limitation "the four states of the device" in line 1. There is no definition of four states in the parent claim. There is no limitation that requires the device to operate in four separate states and in fact there is not a mention of a plurality of states at all and thus one of ordinary skill in the art would not be able to ascertain how the device can be required to set specific commands to each state as this is not defined nor limited in the parent claim which only requires the timing associated with the states, not specific commands.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11 and 30-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The limitation in claim 11 that states "the athletes reacting to the provided environmental state information as appropriate for the current athletic activity is non-statutory because as per MPEP §2105, If the broadest reasonable interpretation of the claimed invention as a whole encompasses a human being, then a rejection under 35 U.S.C. 101 must be made indicating that the claimed invention is directed to nonstatutory subject matter. The requirement that the athletes react in a certain manner encompasses a human being and their reactions, thus is not statutory matter for patentability.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-3, 4, 11, and 22-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karrenberg (US Patent No. 4,949,320).

Karrenberg discloses a device for introducing state changes into athletic activities (Columns 1 and 2) that serves as a time varying device. The disclosure does not state how the time variable is associated but since dials and buttons are used, a skilled artisan would find it obvious to use a binary variable to determine the on and off state of each input in order to ascertain the time as such a method is notoriously well known in the art and obvious when dealing with dials and buttons as it serves as the industry standard in representing an on and off stage and its implementation has been tested and widely used. The device includes a display that presents the state in a form that the athlete may interpret as a change in athletic environment (Column 4, lines 12-17). The device includes a means for setting it in order to determine the timing between state transitions (Column 2, lines 1-35). The device further

axiomatically includes a controller that that can read the device setting to maintain the state in accordance with those setting and communicate to the display of the state (Column 2) as the device is programmed and the functionality would require such a device to maintain operability. The device further includes an interruptible power source (Column 4, lines 44-65) and a durable case (FIG 1).

Regarding claim 3, it would have been obvious to a skilled artisan that the controller discussed above utilizes a microprocessor as is known in the art in order for functionality of such a disclosed device. The usage of one type of controller over another is a design choice and the use of a well-known type of controller such as one that uses a microprocessor would thus be obvious to anyone with skill in the art.

Regarding claim 4, Karrenberg discloses the device comprises sets of differently colored LEDs (Column 4, lines 12-17).

Regarding claim 11, the device is set in the manner it is to be varied (Column 2, line 4), the device varies in state based on these settings (Column 2, lines 10-25) wherein the device displays the state in a form interpretable as change to the athlete (Column 4, lines 12-17) and it is obvious the athlete is to react to such information in their training.

Regarding claims 22-25, the device controls the timing by allowing values to be set using their input devices and thus the frequency of time between transitions determines the state. The device is also capable of being set for a hold time for each transition and the state changes are in a sequential order set by the user. The values obtained by the device control the time spent in each activity and thus also can be set to an average time for each activity as it is controlled by the user.

Regarding claim 26, Karrenberg discloses the power source to be a battery (Column 4, lines 44-65).

Regarding claim 27, there are a number of switches that could interrupt the power such as the reset switch (FIG 1, reference 5c). There is also an on/off switch disclosed (Column 4, lines 9-11).

Regarding claim 28, the implementation of a new structure or visual presentation would be an obvious design adaptation to Karrenberg. Using a conical case as opposed to the structure of Karrenberg would be a matter of design choice, obvious to one of ordinary skill in the art. In fact Karrenberg contemplates other design configurations and specifically states that the construction fro the device is known and thus not described in detail (Column 6). Thus the usage of alternatives housings and displays would be obvious to a skilled artisan who would be motivated by the wants, needs, and desires for their system defined by the specification of usage. The change in structure would not serve to alter the performance of the device and thus would be obvious.

Regarding claim 29, Karrenberg discloses that the lights have different colors (Column 4, lines 12-17).

Regarding claim 30-33, Karrenberg discloses that the device can have its transition programmed, thus the usage of random, periodic, or sequential order and timing would be obvious to a skilled artisan as it merely represents the usage of the device and would not require a different structure and is representative of the contents of the program and not of the device.

Regarding claims 34-36, Karrenberg discloses the device can be used in a number of sports where transitions are required. A skilled artisan understands soccer, basketball, and baseball all require such transitions. The Karrenberg device indicates a state change in such sports and indicates to the player when this change should occur. The device is capable of emitting sounds and thus *using* the device to emit different sounds would be obvious to one of

ordinary skill in the art. Such a change of having the device emit different sounds for each sport is merely representative of the usage of the device and would not require a different structure and is solely defined by the contents of the program and not of the device. Having the device speak would be an obvious improvement to one of ordinary skill in the art, as it would define specific states by what they are not by representative sounds. One of ordinary skill in the art would be motivated to use this type of indication, as it would provide a clearer definition to the user as to what the device is indicating they should be doing as opposed to merely emitting a beep representative of what it should be. Thus improvement would make the device user-friendlier and thus more marketable to consumers who would be drawn to the more explicit instruction it provides.

Response to Arguments

Applicant's arguments with respect to claims 2-3, 4, 11, and 22-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 3,789,402: Device that emits sounds to the user to define different states of athletic activity.

US Patent No. 4,502,489: Measuring an athlete's auditory response time by providing a number of athletic instruction to which they must react.

US Patent No. 6,278,378: Device that defines an activity to a user, provides audible feedback indicative of performance of stated activity.

US Publication No. 2001/0032278: Control program that can generate user specific commands for programmable devices in order to, for example, monitor an athlete by programming the device with instructional command based on the current situation.

US Publication 2001/0002928: Device used for an athlete to audibly indicate a change in the current state of their workout.

US Patent No. 5,921,890: Programmable pacing device that allows a user to set up their own workout and it will audibly indicate changes to them.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Marks whose telephone number is (703)-305-7497. The examiner can normally be reached on Monday - Thursday (7:30AM - 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (703)-308-1745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmm
June 9, 2004

MICHAEL O'NEILL
PRIMARY EXAMINER